UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/474,974	12/29/1999	BALWINDER S. SAMRA	17207-00004	3025

7590   09/04/2002

JOHN S BEULICK
ARMSTRONG TEASDALE LLP
ONE METROPOLITAN SQUARE SUITE 2600
ST LOUIS, MO   631022740

EXAMINER
VAN DOREN, BETH

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 09/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	**Applicant(s)**
Office Action Summary	09/474,974	SAMRA ET AL.
	Examiner	**Art Unit**
	Beth Van Doren	3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 July 2002</u> .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-11 and 13-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-11 and 13-21</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> .   6) ☐ Other: .

DETAILED ACTION

1.   The following is a Final Office Action in response to the communication received on July 2, 2002. Claims 1, 11, and 13-19 have been amended. Claim 12 has been deleted. Claims 1-11 and 13-21 are pending in this application.

Response to Amendment

2.   Applicant's replacement of the originally submitted title to the new title "Methods and Systems for Defining Targeted Marketing Campaigns using Embedded Models and Historical Data" is sufficient to overcome the specification objection set forth in the previous office action.

3.   Applicant's amendment to the specification beginning on page 4, line 21, and ending on page 4, line 4, is sufficient to overcome the specification objection set forth in the previous office action.

4.   Applicant's amendments to claim 11 to include the limitation "said targeting engine having a plurality of models stored thereon" and to claims 14-19 to include the limitation "a plurality of" are sufficient to overcome the rejections under 35 U.S.C. § 112 set forth in the previous office action.

5.   Examiner notes that the limitation "to combine models" is not present in claim 20. Therefore, the rejection of claim 20 under 35 U.S.C. § 112 is withdrawn.

6.   Applicant's amendments to claims 1 and 11 are sufficient to overcome the § 102 rejections set forth in the previous Office Action. Hence, the previous § 102 rejections for those claims are withdrawn. However, new § 102 and § 103 rejections have been established.

Claim Objections

7.   Claim 8 is objected to because it recites the limitation "the target group flagged by the models". Based on the new wording of claim 1, this limitation should more appropriately read "the target group determined by the models". Appropriate correction is required.

8.   Claim 9 is objected to because it recites the limitation "the target group flagged by the models". Based on the new wording of claim 1, this limitation should more appropriately read "the target group determined by the models". Appropriate correction is required.

9.   Claim 10 is objected to because it recites the limitation "the target group flagged by the models". Based on the new wording of claim 1, this limitation should more appropriately read "the target group determined by the models". Appropriate correction is required.

10.   Claim 13 is objected to because it recites the limitation "towards a target group flagged by the plurality of models". Based on the new wording of claim 11, this limitation should more appropriately read "towards a target group determined by the plurality of models". Appropriate correction is required.

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined

was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment

by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-4, 6-11, 13-16, and 18-21 are rejected under 35 U.S.C. 102(e) as being

anticipated by Chou et al. (U.S. 6,061,658).

12.   As per claim 1, Chou et al. discloses a method for increasing the efficiency of marketing

campaigns using a targeting engine for analyzing data input and generating data output, said

method including the steps of:

using historical data to determine a target group based upon a plurality of models

embedded within and executed by the targeting engine wherein the targeting engine combines

the models to define the target group (See figures 1 and 2, column 1, lines 7-14, 25-28, and 55-

60, column 2, lines 11-17, 35-51, and 59-63, and column 3, lines 1-4, 30-37, 44-52, and 57-65,

which discuss creating records about potential customers and consumer household, these records

containing historical data, creating models that represent predicted preferred customer profiles,

and using these models to define the segments that are later used by the target engine of the

computer system to choose a target group. The targeting engine combines models of each of

these potential customers/consumer households by embedding the models and executing the

models to form segments and then target groups); and

directing the marketing campaign towards the target group determined by the models

(See figure 2 and column 3, lines 48-55, which discuss directing the marketing campaign

towards the members of the segments that make up the target group, as determined by the

model).

13.   As per claim 2, Chou et al. further discloses a method wherein said step of using

historical data to determine a target group based upon a plurality of models further comprises the

step of combining models to determine a depth of a targeted mailing (See figure 2, elements 207,

209, and 211, column 2, lines 26-34, 45-51, and 54-58, and column 3, lines 5-10, 38-47, and 52-

56, which discusses using the data to determine a depth of a target mailing, such as market

penetration and the number of prospects for targeting chosen through the clustering and filtering

process of the engine).

14.   As per claim 3, Chou et al. teaches a method wherein said step of using historical data to

determine a target group based upon a plurality of models further comprises the step of

combining models to determine the likelihood of a customer response (Se column 1, lines 21-24,

column 2, lines 46-51, column 3, lines 8-10, which discusses combining the models to determine

the likelihood of a customer response).

15.   As per claim 4, Chou et al. further discloses a method wherein said step of using

historical data to determine a target group based upon a plurality of models further comprises the

step of combining models to generate a potential customer list (See figure 2, element 211, and

column 3, lines 48-55, which discusses combining models to generate a potential customer list

for target marketing).

16.   As per claim 6, Chou et al. discloses a method wherein said step of using historical data

to determine a target group based upon a plurality of models further comprises the step of

combining models to determine expected profitability per customer of a marketing campaign

(See column 1, lines 22-24, and column 2, lines 52-58, in which Chou et al. discusses

determining the expected profitability or revenue potential or propensity to buy per customer of a marketing campaign).

17.   As per claim 7, Chou et al. teaches a method wherein said step of using historical data to determine a target group based upon a plurality of models further comprises the step of combining models to determine the expected profitability per product of a marketing campaign (See column 2, lines 35-51, which discusses determining the expected profitability and penetration per product of a marketing campaign).

18.   As per claim 8, Chou et al. discloses a method wherein said step of directing the marketing campaign towards the target group flagged by the models further comprises the step of rank ordering accounts (column 2, lines 35-58, and column 3, lines 30-34, which discusses rank ordering accounts to determine the most desirable accounts to choose).

19.   As per claim 9, Chou et al. further discusses a method wherein said step of directing the marketing campaign toward the target group flagged by the models further comprises the step of segmenting accounts based on customer demographics (See column 2, lines 26-34, which discusses segmenting accounts based on customer demographics).

20.   As per claim 10, Chou et al. further teaches a method wherein said step of directing the marketing campaign toward the target group flagged by the models further comprises the step of identifying cross-sell targets (See column 1, lines 17-22, which discusses using market research techniques, such as the modeling discusses, to identify cross-sell targets).

21.   As per claim 11, Chou et al. discloses a system configured to increase the efficiency of marketing campaigns, said system comprising:

a customer database which includes customer demographics and historical data (See

figure 3, column 1, lines 7-15 and 19-28, and column 2, lines 11-16 and 46-51, which disclose a

customer database which includes customer demographic and historical data);

a targeting engine for analyzing data input and generating data output, said targeting

engine having a plurality of models stored thereon, said targeting engine uses historical data and

combines said models to determine a target group for marketing (See figures 1 and 2, column 1,

lines 7-14, 25-28, and 55-60, column 2, lines 11-17, 35-51, and 59-63, and column 3, lines 1-4,

30-37, 44-52, and 57-65, which discuss creating records about potential customers and consumer

household, these records containing historical data, creating models that represent predicted

preferred customer profiles, and using these models to define the segments of customers that are

later used by the target engine in choosing a target group. See figure 2 and column 3, lines 48-

55, which discuss directing the marketing campaign towards the members of the segments that

make up the target group, as determined by the models); and

a graphical user interface for accessing a customer database and displaying data output

(See column 3, 57-67, and column 4, 1-4 and 20-22, which discloses a graphical user interface

for accessing a customer database and displaying data output).

22.   As per claim 13, discloses a system further configured to use historical data in said

customer database to direct a marketing campaign towards a target group flagged by the plurality

of models (See figures 1 and 2, column 1, lines 7-14, 25-28, and 55-60, column 2, lines 11-17,

35-51, and 59-63, and column 3, lines 1-4, 30-37, 44-52, and 57-65, which discuss creating

records about potential customers and consumer household, these records containing historical

data, creating models that represent predicted preferred customer profiles, and using these

models to define the segments of customers that are later used by the target engine in choosing a

target group. See figure 2 and column 3, lines 48-55, which discuss directing the marketing

campaign towards the members of the segments that make up the target group, as determined by

the model).

23.   As per claims 14-16 and 18-21, claims 14-16 and 18-21 are system versions of claims 2-4

and 6-9, respectively. Since the specification provides nothing more than a method implemented

in a network environment, claims 14-16 and 18-21 are rejected on the same grounds as the

method of claims 2-4 and 6-9, respectively.

Claim Rejections - 35 USC § 103

24.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chou et

al. (U.S. 6,061,658) in view of Jackson et al. (*Strategic Database Marketing*).

25.   As per claim 5, Chou et al. teaches a method wherein said step of using historical data to

determine a target group based upon a plurality of models further comprises the step of

combining models to determine a score that is used as a measure of desirability of a target group

for inclusion in the marketing campaign (See column 2, lines 35-45, and column 3, lines 8-13

and 35-38, which discusses combining models to determine calculated scores for target groups).

However, Chou et al. does not expressly disclose calculating a risk factor for a target group.

Jackson et al. discloses calculating a risk factor for a target group (See page 184-185

which discusses combining scoring models to take into consideration the prediction of risk when

segmenting a customer database for targeted marketing).

Both Chou et al. and Jackson et al. discuss using historical data and databases to

determine a target group and calculating scores for these target groups based on various factors.

It would have been obvious to one of ordinary skill in the art at the time of the invention to

include risk factors in the factors calculated by Chou et al. as an indicator by which to choose

target groups in order to increase the selective capabilities for the marketing campaign by

allowing for the selection of the most desirable groups of potential customers/consumer

households.

26.   As per claims 17, claim 17 is a system version of claim 5. Since the specification

provides nothing more than a method implemented in a network environment, claim 17 is

rejected on the same grounds as the method of claim 5.

Response to Arguments

27.   Applicant's arguments with respect to claims 1-11 and 13-21 have been considered but

are moot in view of the new ground(s) of rejection.

Conclusion

28.   No claims allowed.

29.   Applicant's amendment necessitated the new grounds of rejection presented in this Office

action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

30.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Deaton et al. (U.S. 6,351,735) discusses consumer modeling using the transaction history

of a consumer. Targeted marketing techniques are based on this historical data.

Eldering (U.S. 6,298,348) discusses consumer profiling models that analyze transactional

history records of a consumer. The consumer is targeted based on this profile.

Root et al. (WO 98/49641) discloses campaign management and targeted marketing

functions using databases that track characteristics of a potential consumer.

"DataMind adds WebPoint to Market one – the Industry's first Enterprise Application for

Real-Time, One-to-One Marketing" (PR Newswire) discloses a targeting engine that evaluates

targeting criteria based on customer data to determine the appropriate marketing offer. These

campaigns are then served to the potential customers.

Morrison ("Target Marketing with Logit Regression") discusses targeted marketing

models using historical sales data stored in a database.

Saarenvirta ("Data Mining to improve profitability") discusses using data mining to

forecast future customer purchases, responses to promotions, customer risk, customer

profitability, etc. The data mining modeling techniques use historical data about a customer,

stored in a database, to facilitate targeted marketing.

Cobrda ("Data Mining") discloses predicting future purchase behavior using response

modeling. This modeling uses historical data, segments, profiling, and/or clustering to make

forecasts about consumers and then uses these forecasts for targeted marketing.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Beth Van Doren whose telephone number is (703) 305-3882.

The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 305-7687 for regular

communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-1113.

evd
bvd
August 27, 2002

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600